

# Regulation

## - Competition rules

### 1. Chassis

- The car chassis have to be limited to 1/10th scale touring car or drift car produced by standard brand. Base chassis must be on the market. Free to apply optional parts. Not allowed are M-chassis or ‘little sports’ chassis in either short-wheelbase or long-wheelbase versions.
- Driven wheels must be attached to an independent suspension.
- Drive shafts to the wheels must include joints.
- Two competitors may not share the same chassis.
- The battery must be mounted between the front axles and rear axles
- Hard antennas (made of carbon, fiberglass rods, steel, etc) are not allowed.
- Any external device emitting smoke or sound are not allowed.
- The use of a bumper is not mandatory, but if using one it must be made of plastic and safe towards other competitor cars.
- Drive systems: RWD class – Only 2wd rear-wheel driven sytems allowed. AWD class – Only 4wd systems allowed.
- Gyro units: RWD and AWD class – Gyro use allowed.
- Overall length(including the body): Max. 490mm
- Wheelbase: Min. 240mm – Max. 270mm
- Overall width (including the body): Max. 230mm. Any part of the body or chassis must clear the technical scrutineering tools.
- Wing: The maximum height of any part of the wing, spoiler, or side dams is 150mm (measured with the chassis stationary at full weight). Side dams up to 40mm(H) x 40mm(L) on each side is permitted.
- Any modification to produce large noises will not be allowed. These include– attaching long headed screws to the pinion gear, modifying the spur gear, bending the center shaft, using nylon tie-wraps, or using any resonating apparatus
- Overall weight(RWD class): Max. 1100g (measured at the rear wheels)
- Overall weight(AWD class): Min. 1380g – Max. 2100g
- Car numbers: Car numbers supplied by the event organizer must be attached to the body and easily visible. One on the front window, one on the right side, and one on the left side, for a total of three car numbers.

### 2. Body

- Only 1/10th scale body shells modeled after actual full-size vehicles allowed. Body shell must be produced by an RCDC member manufacturer, and listed under the RCDC approved body list. The RCDC will only approve officially licensed bodies produced by RCDC member manufacturers.
- Long wheelbase bodies are not permitted.
- Body shells must be painted.
- Front, side, and rear windows shall be clear or transparent. With the exception of the front windshield, cutting out the windows is allowed.
- Electrical accessories are allowed.
- Hybrid body shells (piecing together two different body shells) are allowed. However the body shell must be listed under the RCDC approved body list. An accurate description of the hybrid body shell must be explained when submitting an entry to an event. For example, “Front:XXX(car model) by XXX(manufacturer), Rear:XXX(car model) by XXX(manufacturer)”
- Aero parts may be used as long as the body shell remains within the overall length and width requirements.

### 3. Tires

- For competitors participating in one class, who can get one set of tire from organizer (4 tires: 2 front, 2 rear) . For competitors participating in two classes, two sets of tires will be provided and mixed use of RWD and AWD tires is allowed. Also borrow tires from driver to driver is allowed.
- Driver can buy extra one set of tire for each classes.
- As a basic rule, the rules of the hosting venue will dictate which control tire will be used, with the final selection made by circuit venue and organizer. Control tires for future events held at special temporary circuits will be decided by the organizer. RC-ART tire this time.
- Tires are to be included in the entry fee.
- Requests to replace an improperly glued tire will be accepted (but the competitor must pay for the replacement tire).
- Aside from natural wear to the tire, any modification to the tire to alter grip or tire diameter is not allowed.
- The tires must be mounted in the originally intended orientation (mounting in any other way is not allowed)

### 4. Wheel

- Only 1/10th size on-road or drift wheels (by any manufacturer) that have a scale look may be used.
- The use of dish wheels designed for touring car racing are not allowed.

### 5. Battery

- Only 2-cell LiFe(6.6V) and 2-cell LiPO(7.4V to 7.6V) hard-cased batteries (by any manufacturer) allowed.
- Saddle-pack batteries must be within 139mm(L)x47mm(W)x25.1mm (H) in size per pack.
- Batteries must be sold as having a nominal voltage of 7.6V or lower.
- LiPO charging bags must be used all times when charging.
- Battery packs may not be mounted behind the rear axle.
- Charging without the use of a LiPO charging bag will not be allowed.
- Battery packs with bulged or expanded cases will not be permitted for use.

### 6. Motor

- Only 540-size brushless motors (by any manufacturer) allowed.
- Only commercially available brushless engines 6.5T and more figures such as 7.5 or 17.5 etc. are allowed.

### 7. ESC (Speed Controller)

- ESC units by any manufacturer allowed.
- ESC units with reverse functions may be used.
- Adjustments to timing, boost, and turbo settings permitted.
- The use of sound systems is not permitted.

### 8. Transmitter Frequencies

- 2.4GHz, 27MHz, and 40MHz transmitter frequencies allowed.
- Only transmitter frequencies approved by the Japan Radio Control Safety Association(RCK) allowed.

### 9. Safety

- All cars must not pose a danger to fellow competitors or their cars, technical scrutineering staff, track marshalls, and spectators.
- Cars must be assembled so they can be safely handled.
- Cars deemed to be hazardous may not be permitted for use in competition.

### 10. Competition format

- ‘Tanso’ solo run judging
  - In ‘Tanso’ competition each driver drifts one at a time, judged individually and awarded points.
  - On the second day of competition(Saturday), 8 drivers each from the RWD and AWD classes advance to the finals.
  - On the third day of competition(Sunday), an additional 8 drivers are selected by advancing through a repechage bracket competition for each class. Adding to the 8 drivers that already advanced on Saturday, a total of 16 drivers per class advance to the ‘Tsuiso’ finals.
  - 10.2 ‘Tsuiso’ Final 16
  - In ‘Tsuiso’ competition, drivers are paired off against each other in an elimination format.

Each heat comprises of two passes, with each driver taking a turn to lead. Points are awarded to the drivers for each pass based on the chase driver’ s performance versus the lead driver’ s performance, to determine who advances. Passes are continued until one driver in each pairing prevails. A ‘Tsuiso’ tournament of 16 drivers is held for each class. The number of One more time(extra passes) will be situation-determined.

The allowed staging time between the first car and second car lining up to the starting line is 5 minutes. If a driver is not able to line up to the starting line within 5 minutes, he/she will automatically lose.

- The Grand Final 4
  - 4 drivers will advance from the Tsuiso Final 16, to compete in a round-robin format to determine the overall champion.
  - There will be no limit to the number of One more time allowed.
  - The allowed staging time between the first car and second car lining up to the starting line is 5 minutes. If a driver is not able to line up to the starting line within 5 minutes, he/she will automatically lose.

### 11. Judging criteria (Tanso - Individual run)

- Drifting technique will judged based on the following criteria.
- Drift competition defined: Competing against others to see who is best at intentionally generating a sideways movement from a forward moving car, and holding that state in a smooth manner around the designated course.
- Driving line: A smooth and curved driving line through the designated clipping points or clipping zones is desired. The areas of the car to be driven through the clipping points or zones will be instructed, and points will be awarded accordingly for getting as near as possible to the clipping points or zones. Points will be subtracted for ragged unsmooth driving lines.
- Drift angle: The angle between the longitudinal axis of the car and the driving line is the drift angle. Holding a stable, consistent angle while cornering is desired. And while a large drift angle is good, if the the angle is too big or a correction is made to lessen the angle, points will be subtracted. A large drift angle resulting from a half-spin will not score well.
- Angle change: The quickness, precision, timing, and stability when initiating a drift or making directional changes will be judged. The following types of driving will not score well – drift initiation followed by a late directional change, inability to set an angle or lack of angle upon drift initiation or directional change.
- Speed: Blipping the throttle or lack of throttle will result in lower scores. A noticeable decrease in speed will also result in lower scores.
- Competitors may only start when their name is called by the announcer. Driving before the start signal is not allowed. No competitor may interfere with the run of another car during the judging process. The competitor must wait quietly and keep their car stationary.
- Each competitor may earn a maximum of 100 points for an Individual run(Tanso).
- Judging will be based on a computerized system utilizing cameras and infrared lasers to measure speed, angle, as well as distance from the barriers to calculate a point score.
- Judges will award additional point scores and add them to the score from the computer system to calculate the total point score.
- Depending on the situation, the computer score may be weighed more to eliminate any uncertainties. Futhermore, the ratio of the computer score and judge score will be set to rely on the computer score as much as possible to ensure fairness.
- Judging staff at international competitions will consist of three to five main judges, and two assistant judges, for a total of five to seven judges. Scores will be input by the three to five main judges. In order to ensure fairness, judges selected from three or more countries is desired.
- Details of the judging criteria shall be explained during the driver’ s meeting at each competition. For example, judges will award a maximum of 30 points, “line” , “angle” , “technique” , and “pylon” .
- Points will be subtracted for being too far inside or too far outside the clipping point. However instances such as the front wheels riding over the corner curbing may not pose a problem. Instances such as these will explained accordingly, and during the meeting.
- Individual run(tanso) judging will take the average score of the best two runs out of three to five possible runs (to be determined based on the number of participants).
- Judging for the Repechage will only count one score.
- Any competitor who fails to show up in time for their start will forfeit their run and not be scored. However if advanced notice is given and the organizer is able to reschedule the heat, the competitor may be moved to a different heat. But for Tandem runs(tsuiso), the 5 minute rule shall apply.
- Approaching the judging staff while they are judging is prohibited, and will result in a penalty. Problems or issues related to the running of the heat are an exception.
- Once a competitor is on the driving rostrum, they may not return to the pit area. However if the competitor is carrying their own tools or parts to make an adjustment or repair, they may do so near the close vicinity of the rostrum.
- Any competitor taking their car back to the pit area after technical inspection must go through technical inspection again prior to running in their heat.
- Any competitor on the rostrum not driving shall wait and stand behind competitors driving on the track. All each other to choose their driving spot freely.

11.22 Any competitor interfering with the driving of another competitor will be disqualified.

### 12. Judging criteria (Tsuiso - Tandem run)

- The same criteria for individual runs will be applied to judge the leading car.
- If judging criteria for the follow car include: distance gained on the leading car, angle, angle change, speed, driving line, and overall impression compared to the leading car.
- Closing in on the inside of the leading car while drifting is desired.
- Staying with the leading car closely or closing in and backing off are also techniques that judges may award scores.
- If the leading car is determined to have adjusted their speed to block the driving line or acceleration of the follow car while getting up to speed, a scoring advantage will be given to the follow car.
- If the leading car does not leave any space for the follow car and follows closely the inside driving line, or closes the door on a follow car already on the inside, the leading car will be penalized and the scoring advantage will go to the follow car.
- Overtaking is not allowed.
- Light contact is not a problem, but pushing the other car into a spin, understeer, or off of the track will result in the scoring advantage going to the competitor receiving the contact.
- Should the leading car suddenly slow down or block the driving line and cause the follow car to crash into it, the scoring advantage will be given to the follow car.
- Judging will be handled by the three to five main judges. Each judge will clearly indicate their winning or losing decision.
- One more time runs will be done accordingly. However an unlimited number of One more time runs will be allowed for the Grand Final 4.

### 13. Strictly Prohibited

- Any verbal abuse towards a fellow competitor, or actions obstructing the run of a fellow competitor is strictly prohibited.
- Any verbal abuse toward a competition judge is strictly prohibited.
- Any action obstructing the progress of the competition is strictly prohibited.
- Consumption of any alcohol drink within the event venue during competition is strictly prohibited.
- Alcohol drinks may not be consumed at event venues where it is prohibited.
- Smoking is only allowed in smoking permitted areas if available.
- Participating competitors found in violation of the rules may be penalized by having all results nullified, and/or expelled from competition.

Causes for rejudging

- Due to a problem with the scoring system.
- Due to problems with the track.
- Based on approval by the organizer.

### 14. Technical Inspection

- Prior to each run, competitors must pass technical inspection.
- Only cars that have passed inspection by the technical staff will be allowed on the circuit.
- Technical inspection will generally be performed prior to the run, but technical staff may conduct inspections at any time throughout the duration of the competition.
- Should a competitor be found with a technical infraction during the competition, all results prior to the infraction for that competitor will be nullified.

### 15. Protest

- Should a participating competitor feel that he/she was judged unfairly, the following method may be used to file a protest.
- The protest must be submitted within 30 minutes of the occurence causing the protest, with an written explanation for the protest, along with a protest filing fee(JPY 5000).
- If the protest is accepted, the protest filing fee will be returned to the protesting competitor.